

A Case of Ectrodactyly in a Neonate

Mitul B. Kalathia, Avani A. Seta, Parin N. Parmar
Department of Pediatrics, PDU Medical College, Rajkot, Gujarat, India

ABSTRACT

Ectrodactyly also known as Split hand/foot malformation is a rare limb malformation with autosomal dominant inheritance with variable penetrance, commonly known as “lobster claw hand”. Usually it involves midline clefts of the hands and feet with syndactyly. We report a neonate with ectrodactyly and brief review of literature of condition.

Key words:

Ectrodactyly, split hand/foot malformation, syndactyly

INTRODUCTION

Ectrodactyly or split hand-foot malformation (SHFM) is a rare malformation involving the central rays of the hands and feet. Usually, it affects one to all four limbs randomly. It is associated with syndactyly with oligodactyly and



Figure 1: Ectrodactyly of right lower limb



Figure 2: Syndactyly and polydactyly of right lower limb

rarely polydactyly leading to “lobster claw” appearance. Its prevalence has been reported to be about 1-9/100000.^[1] The deformity is present since birth and maybe associated with other dysmorphic features and anomalies in some syndromes. Non-syndromic patients usually follow autosomal dominant inheritance with variable penetrance. Syndromic patients have autosomal recessive or x-linked recessive inheritance. Sensorineural hearing loss is common in patient with ectrodactyly with syndromic association. It has also been observed with Aniridia and Alport syndrome.^[1] Five different genetic mutations are known to be associated with SHFM. Type I, the most frequent variety, is due to a mutation on chromosome 7.^[1] We report a neonate showing ectrodactyly [Figure 1] and syndactyly and polydactyly [Figure 2] of right lower limb.

Ectrodactyly can be treated surgically in order to improve function and appearance. Prosthetics may also be used.^[2] Parents should be counseled regarding the possibility of recurrence of the disease in the future siblings and antenatal diagnosis by ultrasonography should be offered.^[3]

REFERENCES

1. Jindal G, Parmar VR, Gupta VK. Ectrodactyly/split hand feet malformation. Indian J Hum Genet 2009;15:140-2.

Address for correspondence:

Dr. Mitul B. Kalathia,
Department of Pediatrics, PDU Medical College,
Rajkot, Gujarat, India.
E-mail: dr.mitulkalathia@gmail.com

Access this article online

Quick Response Code:



Website:

www.jcnnonweb.com

DOI:

10.4103/2249-4847.120013

2. Pinette M, Garcia L, Wax JR, Cartin A, Blackstone J. Familial ectrodactyly. *J Ultrasound Med* 2006;25:1465-7.
3. Arbués J, Galindo A, Puente JM, Vega MG, Hernández M, de la Fuente P. Typical isolated ectrodactyly of hands and feet: Early antenatal diagnosis. *J Matern Fetal Neonatal Med* 2005;17:299-301.

How to cite this article: Kalathia MB, Seta AA, Parmar PN. A case of ectrodactyly in a neonate. *J Clin Neonatol* 2013;2: 151-2.

Source of Support: Nil, **Conflict of Interest:** None declared.

"Quick Response Code" link for full text articles

The journal issue has a unique new feature for reaching to the journal's website without typing a single letter. Each article on its first page has a "Quick Response Code". Using any mobile or other hand-held device with camera and GPRS/other internet source, one can reach to the full text of that particular article on the journal's website. Start a QR-code reading software (see list of free applications from <http://tinyurl.com/yylh2tc>) and point the camera to the QR-code printed in the journal. It will automatically take you to the HTML full text of that article. One can also use a desktop or laptop with web camera for similar functionality. See <http://tinyurl.com/2bw7fn3> or <http://tinyurl.com/3ysr3me> for the free applications.